

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-------------------------|------------------|
| 10/622,610 | 07/18/2003 | Wilfried Knott | 512425-2093 | 4308 |
| 7590 01/31/2005 FROMMER LAWRENCE & HAUG LLP 745 Fifth Avenue | | | EXAMINER | |
| | | | ZIMMER, MARC S | |
| New York, NY | | | ART UNIT | PAPER NUMBER |
| • • | | | . 1712 | |
| | | | DATE MAILED: 01/31/2005 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | * | | | | |
|--|--|--|--|--|--|
| | Application No. | Applicant(s) | | | |
| Office Action Summers | 10/622,610 | KNOTT ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| The MAII INC DATE of this communication | Marc S. Zimmer | 1712 | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sneet with the c | correspondence address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on 19 No. | ovember 2004. | | | | |
| 2a) This action is FINAL . 2b) ⊠ This | action is non-final. | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | , | | | |
| 4) ☐ Claim(s) 1-14 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1,2,4-6 and 9-14 is/are rejected. 7) ☐ Claim(s) 1-14 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or | vn from consideration. | | | | |
| Application Papers | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | |
| | epted or b) objected to by the f | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | |
| 11) The oath or declaration is objected to by the Ex | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau | s have been received. s have been received in Application ity documents have been receive | on No | | | |
| * See the attached detailed Office action for a list of | of the certified copies not receive | d. | | | |
| Attachment(s) | _ | , | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa | | | | |

Art Unit: 1712

Election Restriction

The present Examiner is in agreement with Applicant's position that a search of all of the claims does not represent an undue burden, particularly since it appears that the organofunctional polysiloxane required of all incarnations of the claimed invention represents the novel feature.

Accordingly, the restriction requirement is hereby withdrawn. The patentability of all of claims 1-14 will be assessed herein.

Claim Objections

Claims 1-14 are objected to because conflicting ideas as to the definition of "e" are present. Each of the independent claims states that e is " $0, \ge 1$ ". Taken in the context of the Specification, it seems as though oxyalkylene units derived from styrene oxide are essential to the efficacy of Applicant's invention yet each of the independent claims clearly outlines a scenario where "e" equals zero. The proviso attached to this scenario is also confusing because it makes mention of a residue R^{1} that is not defined anywhere in the disclosure. Clarification is required.

For the purpose of evaluating of evaluating the claimed invention(s) against the prior art, it has been assumed that there must be at least one unit (CH₂Ch(Ph)-O) in the oxyalkyene graft.

Claim 1 is objected to because it is believed that the term "dispensing" was supposed to be "dispersing". The Examiner is unfamiliar with the concept of a dispensing resin.

Claim 10 is objected to because it is unclear what constitutes a spiral inorganic pigment.

Prior art documentation of spiral organic pigments has been noted but there does not appear to be any previous mention of the inorganic congeners. Clarification including the meaning of spiral as it pertains to these pigments is requested.

Art Unit: 1712

Claim 11 is objected to because "kaolin" has been misspelled.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is no antecedent basis in claim 1 for the incorporation of an auxillary/additive.

Claim Rejections – 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 5, 9-10, and 13-14 are rejected under 35 U.S.C. § 102(b) as being anticipated by Burow et al., U.S. Patent # 5,035,748. Burow discloses the stabilization of inorganic pigment-containing formulations by treating said pigments with a polysiloxane bearing phenylethyl groups that adheres to all of the structural limitations of the polymer compound outlined in claim 1 where R¹ = CH₂CHR*Ph (column 5, lines 10-20). Treatment, which does not result in chemical attachment to the pigment surface (column 2, lines 44-48), is preferably carried out before spray drying the pigment by adding the siloxane polymer to a suspension of the pigment in a volatile liquid such as water (column 4, lines 27-37). The polymer treating

Application/Control Number: 10/622,610

Art Unit: 1712

agent may be added neat or as an emulsion. The resulting pigment may be employed in various applications including the formulation of paints (column 6, lines 17-19). Among the pigments contemplated for treatment are titanium dioxide and iron oxide.

Claim Rejections – 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4, 6, 11, and 12 are rejected under 35 U.S.C. §103(a) as being unpatentable over Burow et al., U.S. Patent # 5,035,748. Burow does not expressly mention the combination of the pigment composition set forth therein with a filler, additive or dispersing resin. Nonetheless, it will be appreciated by one of ordinary skill that a paint formulation comprising the materials set forth in Burow's invention will also contain fillers as well as one or more of the adjuvants set forth in claim 12. "It is <u>prima facie</u> obvious to add a known ingredient to a known composition for its known function." *In re Lindner* 173 USPQ 356; *In re Dial et al* 140 USPQ 244.

Concerning claim 11, these silicate compounds (talc and kaolin are silicates of magnesium and aluminum respectively) are, likewise, known paint additives with known utility as extender pigments. See, for instance, the abstract of JP 4-342520 A which teaches an invention almost entirely analogous to the second embodiment of Applicant's invention differing only in that the polyoxyalkylene grafts are not derived from styrene oxide as is the case with the instantly claimed siloxane copolymer.

Art Unit: 1712

Allowable Subject Matter

Claims 3, 7, and 8 are objected to being dependent from a rejected base claim but would be allowable if rewritten to contain all of the limitations of the claim(s) from which they depend.

There is no indication that the instant polymer would be useful for stabilizing organic pigments.

Applicant is further advised that the embodiment where R¹ denotes an oxyalkylene polymer residue having styrene oxide repeat units would also appear to be patentable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 571-272-1096. The examiner can normally be reached on Monday-Friday 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 29, 2005

Mare Zimmer